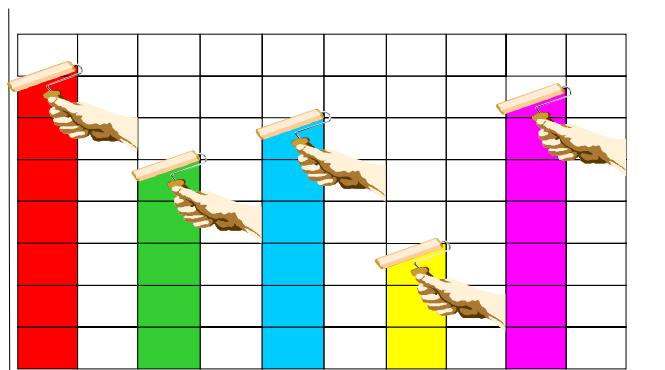


Interpreting Information

High School Math Performance Event



by

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Interpreting Information

Purpose: This performance event will assess the student's ability to interpret various forms of information and convert the data given into a useful format. The student must use a table to get information, convert the data into percentages, and use those to construct a circle graph and a bar graph.

Show-Me Standards Addressed:

Knowledge: M1, M3

Performance: 1.8, 1.4

Grade Level Range: High School Level

Subject Area: Math

Materials and Resources Needed: pencil, colored pencils, ruler, protractor, calculator (optional), Student Performance Event Packet (including the Student Prompt, the Response Sheets, and the Scoring Guide).

Time Needed for Event: 60-70 minutes

Instructions for Administration: Provide students with a Student Performance Event Packet. Make sure they understand the directions within the student prompt. They will need to write their responses on Student Response Sheets #1 and #2. Go over the scoring guide so students know what is expected for a quality response.

Pre-assessment Instructions: Students will need the prerequisite knowledge of constructing a circle graph (using degrees in a circle) and bar graph, converting decimals, fractions, and percents, interpreting data, and providing support for choices.

Interpreting Information

Student Prompt

The principal of Smith-Cotton High School has to make a presentation to the counselors on the number of students taking math classes. He would like to increase the number of seniors taking math and has to show data that indicates the need for an increase.

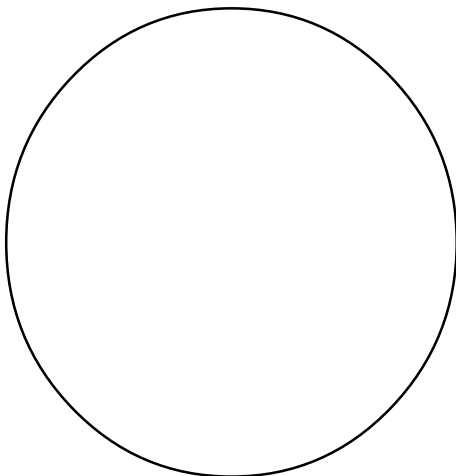
Use the bar graph below to complete the table on Student Response Sheet #1. After completing the table, use the information to create a circle graph for the first set of data and a bar graph for the second set. Choose the graph that you think would work best to convince the counselors there is a need for an increase in the number of seniors taking math. Write an explanation giving the reasons for your choice.

Interpreting Information Student Response Sheet #1

Use the data contained in the bar graph to complete the table.

	Circle Graph Data		Bar Graph Data
Grade level of students	The percent of math students at each grade level of all students taking math .	The degree of a circle that represents the percent on the left.	The percent of <u>students</u> taking math in each grade
9th grade			
10th grade			
11th grade			
12th grade			

Use the data contained in the chart above to construct a circle graph and a bar graph indicating the appropriate percents and grade levels. Be sure to label your graphs.



[illegible]

Choose the graph that you think would work best to convince the counselors there is a need for an increase in the number of seniors taking math. Write an explanation giving the reasons for your choice.

Interpreting Information

Scoring Guide

Score Point: 4

The response shows the student has a complete and accurate understanding of the needed mathematical skills to solve the problem. The student has completed the chart accurately. Both graphs are accurate and clearly depict the data. The explanation for the choice clearly communicates the support.

Score Point: 3

The response shows the student has a sufficient understanding of the needed mathematical skills to solve the problem. The student has completed the chart and the data is, for the most part, correct. There may be one or two minor mistakes in computation. Both graphs are, for the most part, accurate and depict the data. The explanation for the choice communicates the support but it may lack focus at one or two points.

Score Point: 2

The response shows the student has a partial or incomplete understanding of the mathematical skills needed to solve the problem. The student has attempted to complete the chart; the data contains many critical errors. The data in the graphs has been displayed inaccurately and/or the graphs may be incomplete or difficult to understand. The explanation of support for the choice may be confused or lack focus.

Score Point: 1

The response shows the student has little or no understanding of the needed mathematical skills to solve the problem.

Score Point: 0

Off Task or No Attempt